

CLAIMS:

- 5 C1 sub 7
1. A system comprising:  
an interface of a target application, the interface comprising a plurality of operations  
to be selected by a user;  
a monitoring device configured to monitor data of selecting of the plurality of  
operations of the interface by the user, and to encode and store the monitored data into a log  
file;  
a communicating device configured to receive the log file of the monitored data, to  
decode the stored encoded log file, to create a message of the monitored data, and to then  
10 communicate the message of the monitored data.
  2. A system according to Claim 1, wherein the target application is a software  
application and the interface is a display screen of the software application.
  3. A system according to Claim 1, wherein the target application is an image forming  
device and the interface is an operation panel of the image forming device.
  - 15 4. A system according to Claim 1, wherein the target application is an appliance and  
the interface is an operation panel of the appliance.
  5. A system according to Claim 1, wherein the communicating device sends the log  
of the monitored data when the user exits the target application.
  - 20 6. A system according to Claim 1, further comprising a setting unit configured to set  
a number of sessions of the target application to be executed by the user prior to the  
communicating device communicating the log file of the monitored data.
  7. A system according to Claim 1, wherein the monitoring device encodes the  
monitored data into the log file and the communicating device decodes the monitored data

from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms.

8. A system according to any one of Claims 1-7, wherein the communicating device communicates the log of the monitored data by Internet mail.

5 ~~sub~~ 9. A system comprising:  
interface means of a target application means, the interface means for providing a plurality of operations to be selected by a user;  
monitoring means for monitoring data of selecting of the plurality of operations of the interface means by the user, and for encoding and storing the monitored data into a log file;  
10 communicating means for receiving the log file of the monitored data, for decoding the stored encoded log file, for creating a message of the monitored data, and for communicating the message of the monitored data.

10 10. A system according to Claim 9, wherein the target application means is a software application and the interface means is a display screen of the software application.

15 11. A system according to Claim 9, wherein the target application means is an image forming device and the interface means is an operation panel of the image forming device.


12. A system according to Claim 9, wherein the target application means is an appliance and the interface means is an operation panel of the appliance.

20 13. A system according to Claim 9, wherein the communicating means sends the log of the monitored data when the user exits the target application means.

14. A system according to Claim 9, further comprising a setting means for setting a number of sessions of the target application means to be executed by the user prior to the communicating means communicating the log of the monitored data.

15. A system according to Claim 9, wherein the monitoring means encodes the monitored data into the log file and the communicating means decodes the monitored data from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms.

5 16. A system according to any one of Claims 9-15, wherein the communicating means communicates the log of the monitored data by Internet mail.

 17. A method of monitoring usage of an interface of a target application, the interface including a plurality of operations to be selected by a user, comprising the steps of:

10 monitoring data of selecting the plurality of operations of the interface selected by the user;

generating a log file of the monitored data by encoding the monitored data and storing the encoded monitored data into the log file; and

15 creating a message of the monitored data by reading the encoded monitored data from the log file and decoding the encoded monitored data, and communicating the message of the monitored data.

18. A method according to Claim 17, wherein the target application is a software application and the interface is a display screen of the software application.

19. A method according to Claim 17, wherein the target application is an image forming device and the interface is an operation panel of the image forming device.

20 20. A method according to Claim 17, wherein the target application is an appliance and the interface is an operation panel of the appliance.

21. A method according to Claim 17, wherein the communicating step sends the log of the monitored data when the user exits the target application.

22. A method according to Claim 17, further comprising a step of setting a number of sessions of the target application to be executed by the user prior to the communicating device communicating the log of the monitored data.

23. A system according to Claim 17, wherein the encoding step encodes the monitored data into the log file and the decoding step decodes the monitored data from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms.

24. A method according to any one of Claims 17-23, wherein the communicating step communicates the log of the monitored data by Internet mail.

25. A computer program product comprising:  
a computer storage medium and a computer program code mechanism embedded in the computer storage medium for causing a computer to monitor a user's usage of an interface of a target application, the interface comprising a plurality of operations to be selected by a user, comprising:

a first computer code device configured to monitor data of selecting of the plurality of operations of the interface by the user, and to encode and store the monitored data into a log file;

a second computer code device configured to receive the log file of the monitored data, to decode the stored encoded log file, to create a message of the monitored data, and to then communicate the message of the monitored data.

26. A computer program product according to Claim 25, wherein the target application is a software application and the interface is a display screen of the software application.

27. A computer program product according to Claim 25, wherein the target application is an image forming device and the interface is an operation panel of the image

forming device.

28. A computer program product according to Claim 25, wherein the target application is an appliance and the interface is an operation panel of the appliance.

29. A computer program product according to Claim 25, wherein the second computer code device is further configured to send the log of the monitored data when the user exits the target application.

30. A computer program product according to Claim 25, further comprising a third computer code device configured to set a number of sessions of the target application to be executed by the user prior to the second computer code device communicating the log of the monitored data.

31. A computer program product according to Claim 25, wherein the second computer encodes the monitored data into the log file and decoded the monitored data from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms.

32. A computer program product according to any one of Claims 25-31, wherein the second computer code device is further configured to communicate the log of the monitored data by Internet mail.